

Serial No.: 10/519,717
Atty. Docket No.: P70334US0

REMARKS

The Office Action mailed December 22, 2008, has been carefully reviewed and, by this Amendment, Applicants have amended claims 15, 28 and 30, and added claim 35. Accordingly, claims 15-35 are pending in the application. Claims 15, 30 and 35 are independent. In view of the amendments and the following remarks, favorable reconsideration and allowance of this application is respectfully requested.

The Examiner rejected claims 15-23 and 25-34 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,047,163 to Miyoshi in view of U.S. Patent No. 5,696,518 to Itoh et al. ("Itoh"). Also under 35 U.S.C. 103(a), the Examiner rejected claim 24 as being unpatentable over Miyoshi and Itoh in view of U.S. Patent No. 6,123,450 to Bach.

As clarified in amended claims 15 and 30, and also as set forth in new claim 35, the present invention is directed to a timepiece comprising a middle, a watch movement housed in the middle, a transceiver circuit associated with the movement and a solid electrically conductive monobloc mass having the shape of at least a portion of a ring disposed on an outer periphery of the middle and connected to the transceiver circuit. This solid electrically conductive monobloc mass *alone* forms an antenna for

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the transceiver circuit. An antenna formed of only a solid electrically conductive monobloc mass is not shown by the prior art.

Miyoshi discloses a miniature radio apparatus, such as a watch, having a loop antenna that includes the human body. This loop antenna is much more complex than the solid electrically conductive monobloc mass of the presently claimed invention. Specifically, the antenna disclosed for use with Miyoshi's radio apparatus requires not only two separate antenna terminals, namely an outer ring 61 and the rear cover 66 of the watch, but also the body of the person wearing the watch who, if the watch is worn on the left arm, must make contact with the outer ring 61 with the right hand to form the antenna and enable radio information to be received (see column 4, lines 3-15).

Implementation of the complex system of Miyoshi is very difficult, since the technical properties of the system depend upon the particular user wearing the watch and hence system performance may vary from person to person or at different times. For example, depending upon whether the wearer's skin is dry or wet, the galvanic contact of the person's body with the antenna elements may modify the matching of the electric wave, induced by the wearer's hand contact with the ring 61, to the reception

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frequency of capacitor and coil elements of the device's reception circuit (see Figure 8 and column 4, lines 15-20). Variability in performance may also be introduced by dirt or oxidation on the outer surfaces of the antenna elements.

Furthermore, in the embodiment of Miyoshi shown in Figures 3-8, the watch can only receive signals when the user touches the outer ring 61. Thus, reception is not continuous (see column 4, line 51 to column 5, lines 15), rendering use of the watch bothersome and problematic. The embodiment shown in Figure 9 is less problematic in this regard, relying on the watch band to form one of the antenna elements which may cooperate capacitively with the wearer's body. Nonetheless, the watch band must be connected to the transceiver circuit through the bracelet attachments of the watch which can introduce difficulties and, in order to receive radio signals, the wearer must stand still with the arm along the torso as shown in Figure 9. Finally, in any event, the embodiment of Figure 9 still needs a galvanic contact of the rear cover of the watch with the arm of the user so that the difficulties associated with changing skin conditions as discussed in connection with the first Miyoshi embodiment still arise.

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Clearly, Miyoshi does not teach or contemplate the simple antenna structure claimed by the present invention in which only a single monobloc mass forms the antenna. With this simple construction, the timepiece according to the present invention can receive radio signals whether it is being worn by the user or not.

Itoh also does not teach an antenna as claimed, but is relevant only for showing an antenna located outside the perimeter of the watch case. Beyond that, the antenna of Itoh clearly is much more complicated than the claimed invention and effectively teaches against a partial or full ring-shaped monobloc mass that is the *only* component of the antenna. Further, there is nothing in either Miyoshi or Itoh that would suggest their combination, or how their differing antenna structures could be combined as they are completely incompatible with one another. In any event, any combination of Miyoshi and Itoh would not result in an antenna formed by a monobloc mass alone, as claimed.

For at least the foregoing reasons, claims 15, 30 and 35 are patentable over the prior art. Favorable consideration and allowance thereof is requested.

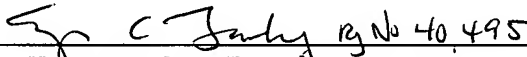
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Claims 16-29 and 31-34 are also in condition for allowance as claims properly dependent on an allowable base claim and for the subject matter contained therein.

With this amendment and the foregoing remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any questions or comments, the Examiner is cordially invited to telephone the undersigned attorney so that the present application can receive an early Notice of Allowance.

Respectfully submitted,

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